

PATENT COOPERATION TREATY

TRANSLATION

PCT

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:		Date of mailing (day/month/year) 05. 05. 2005	
Applicant's or agent's file reference		FOR FURTHER ACTION See paragraph 2 below	
International application No. PCT/RU2005/000033	International filing date (day/month/year) 03.02.2005	Priority date (day/month/year) 30.06.2004	
International Patent Classification (IPC) or both national classification and IPC A47C1/02, B60N2/24, A63B23/04			
Applicant SOLODOVNIKOV, Vladimir Alexandrovich			

1. This opinion contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the opinion
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input checked="" type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/RU	Authorized officer
Facsimile No.	Telephone No.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/RU2005/000033

Box No. I

Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language
_____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/RU2005/000033

Box No. IV Lack of unity of invention

1. ☐ In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has:
- ☐ paid additional fees
- ☐ paid additional fees under protest
- ☐ not paid additional fees
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
- ☐ complied with
- ☒ not complied with for the following reasons:

The present international application claims inventions in accordance with claims 1 and 7 that are not so linked as to form a single general inventive concept and do not have the same or similar special technical features defining a contribution over the prior art. The special technical feature of claim 1 is that each leg exercising means is in the form of a self-contained module comprising a bearing body, which has a pneumatic piston loading device disposed therein and a pivoted power lever hingedly attached from the external side. The special technical feature of the device as per claim 7 is that the pneumatic piston loading device is equipped with a second pneumatic cylinder, which is analogous in design to the first and mounted parallel thereto, and the kinematic drive is equipped with a cam mechanism.

4. Consequently, this opinion has been established in respect of the following parts of the international application:
- ☐ all parts
- ☐ the parts relating to claims Nos. _____

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/RU2005/000033

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-10	YES
	Claims		NO
Inventive step (IS)	Claims	1-10	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-10	YES
	Claims		NO

2. Citations and explanations:

Sources of information:

D1 WO 1997/045168 A1

D2 DE 3817419 A1

D3 US 5498222 A

D4 EP 1304144 A1

The closest prior art with respect to the claimed group of inventions is D1.

D1 discloses a chair comprising two leg exercising means, each of which has a pivoted power lever with a footrest, said lever being kinematically connected to a pneumatic piston loading device, and a system for regulating the force on the levers, which comprises a receiver connected to the loading devices.

Claim 1 differs from D1 in that each leg exercising means is in the form of a self-contained module accommodated at seat level in the hollow armrest, a loading device being mounted inside the body of said self-contained module and a power lever being hingedly mounted on the external side thereof. The footrest is mounted in such a way as to be

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/RU2005/000033

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

capable of moving along the lever and being fixed in working and neutral positions, which increases the functional and operational capabilities of the chair and makes said chair more comfortable almost without altering the external appearance thereof.

D2-D4 disclose chairs comprising means for exercising the legs while seated, however, not one of said documents discloses that each means is self-contained, making it possible to use one means if necessary or each means with its control mode, which lowers the functional possibilities of the chair and reduces the comfort thereof.

Therefore, the distinguishing features of claim 1 are not known from the prior art, making it possible to conclude that claim 1 and dependent claims 2-6 meet the requirements for novelty and inventive step.

D1 discloses a means for exercising the legs while seated comprising a load-bearing structure, on which a pneumatic piston loading device with a pneumatic cylinder is mounted, and a pivoted power lever with a footrest, said lever being connected by a kinematic drive to the cylinder rod.

Claim 7 differs from D1 in that the loading device is provided with a second piston cylinder, which is analogous to the first and situated parallel thereto, both cylinders are hingedly connected to the load-bearing structure, the kinematic drive comprises a cam mechanism having at least one disk with two diametric curved slots,

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/RU2005/000033

Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

said disk being attached to the axis of the power lever, and the pneumatic cylinder chambers are interconnected, which provides the user with increased comfort owing to the almost constant force that is applied by the user and that can be adjusted by the user himself, wherein the means may be used both for the right and the left leg.

Different variants of means for exercising the legs while seated are known from the prior art (D2-D4), however, none of the aforesaid documents discloses a means that makes it possible to provide for the two-way loading of the power lever when the piston moves and for user force control. Consequently, the distinguishing features of claim 7 are not known from the prior art (D2-D4), which makes it possible to conclude that claim 7 and dependent claims 8-10 meet the requirements for novelty and inventive step.

Claims 1-10 meet the requirements for industrial applicability.